# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

## BOARD ORDER NO. R6T-2006-0020A1 WDID NO. 6A180506011

### AMENDED WASTE DISCHARGE REQUIREMENTS

**FOR** 

# SPALDING COMMUNITY SERVICES DISTRICT SEWAGE EVAPORATION PONDS

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The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

## 1. Discharger

For the purposes of this Order, Spalding Community Services District is referred to as the "Discharger."

## 2. Facility

For the purposes of this Order, the Discharger's sewage evaporation ponds are referred to as the "Facility."

3. History of Previous Regulation by the Water Board

On May 13, 2006, the Water Board adopted new waste discharge requirements for the Facility, Board Order No. R6T-2006-0020, authorizing disposal of up to 13.7 million gallons of wastewater annually.

### 4. Reason for Action

The Discharger submitted a revised report of waste discharge on July 17, 2006, requesting authorization to use a proposed spray-mist evaporation enhancement system. The revised report of waste discharge incorporated, by reference, the Discharger's original report of waste discharge (received on June 7, 2005), which included the proposed spraying system to enhance evaporation. Changes to Board Order No. R6T-2006-0020 are necessary to allow use of the evaporation-enhancement system and to increase allowable flow to the Facility as requested by the Discharger.

#### 5. Requested Changes

The Discharger requests to increase currently authorized disposal rates in reliance on the evaporation enhancement system. Based on the revised report of waste discharge, allowable disposal rates would increase from 37,500 gallons per day to 70,700 gallons per day, an 88 percent increase. Under this proposal, the system would change from a "passive" (requiring little to no management)

solar evaporation system to a combined passive-plus-mechanical evaporation system. Board Order No. R6T-2006-0020 *Attachment D – Water Board CEQA Findings*, contains the following concerning this matter:

# "D.4 Water Board Analysis and Findings Concerning Potentially Significant Water Quality Effects Associated with Changes to the Project Certified in the Final EIR

The Project, as certified in the Final EIR, included 34.8 acres of evaporation ponds constructed to contain water at a depth of 2.6 feet or less. The evaporation ponds as proposed in the report of waste discharge total 20.2 acres with a depth of water up to 5.0 feet, and two feet of freeboard. Concurrent with reducing the size of the proposed wastewater ponds, the Discharger proposed an evaporation enhancement system. . . The report of waste discharge indicates total evaporation rates will remain similar to those evaluated in the Final EIR . . . by . . . spraying effluent above one of the evaporation ponds. . . . [The Water Board notes that] If the wastewater is not eliminated from the ponds at the projected rates, there is potential for the ponds to become overloaded and spill partially-treated and concentrated wastewater to the environment. Because wastewater spills would violate waste discharge requirements and discharge prohibitions this would be considered a potentially significant effect."

Because the Environmental Impact Report (EIR, see Finding No. 6, below) certified for the project did not include using spray-enhanced evaporation, the Water Board requested that the Discharger evaluate significant or potentially significant environmental effects from the use of the spray evaporation system, to comply with the California Environmental Quality Act (CEQA, Public Resources Code section 21000, et seq.). Spray system use was not authorized by the Water Board, with a concomitant reduction in the authorized flow rate to the Facility as a result of this evaluation not being completed by the Discharger

## 6. <u>California Environmental Quality Act Compliance</u>

The Discharger, acting as the CEQA Lead Agency, prepared a Final Environmental Impact Report (EIR) for the Spalding Community Services District Wastewater Collection and Treatment Facilities (Project) that was certified by the Discharger on May 2, 2000. The Discharger adopted Resolution 2006-17 certifying an addendum to the Final EIR on July 18, 2006.

The Lead Agency's July 2006 EIR addendum evaluated the use of a spray evaporation system, and identified a potentially significant environmental effect to air quality (odor). The Lead Agency determined no significant effects would occur due to its air quality mitigation requirements to prevent spraying when wind speeds are greater than 40 miles per hour, or when winds blow in a direction that would carry spray mist beyond the lined pond area. No other significant or potentially significant environmental effects were identified by the Lead Agency, including any potential water quality impact. The EIR addendum was not circulated for public review, and thus the Water Board was not afforded an opportunity to comment on the Lead Agency's findings, which did not address the concerns for significant effects in Attachment D, section D.4, as quoted above.

The Water Board is a CEQA Responsible Agency in this matter. When an EIR addendum has been prepared for a project, a Responsible Agency shall not approve the project as proposed, pursuant CEQA Guidelines, section 15096(g)(2), if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment. Pursuant to CEQA Guidelines section 15096(f) and section 15164(d) the Water Board must consider the addendum with the final EIR prior to making a decision on the project.

The Water Board, acting as a CEQA Responsible Agency, has evaluated the addendum with the Final EIR and determined no significant and potentially significant impacts to water quality were identified by the Lead Agency that were not previously addressed. The Water Board previously certified the Final EIR concurrently with adoption of Board Order No. R6T-2006-0020. The Water Board's CEQA determinations, are unchanged. To address the potential impacts from wastewater overflows the Water Board is requiring additional monitoring requirements and contingency planning.

# 7. Revised Report of Waste Discharge and Changes to Facility Monitoring and Reporting Requirements

The revised report of waste discharge provides a basis to increase the allowable effluent flow into the Facility. However, the discharge report contains a number of modeling assumptions, unknown parameters, and variables difficult to quantify without measuring *in situ*. Specifically, assumptions and estimates are made concerning the eventual wastewater flows as build-out progresses, the efficiency of the evaporation enhancement system, and the annual precipitation amounts. Such uncertainties are not uncommon in models of complex systems.

Certain variables such as wastewater flows and evaporation rates can be measured to reduce uncertainty in projections of wastewater storage needs. Because of the above-mentioned uncertainties in the water balance model and because the 88 percent increase in disposal relies on enhanced evaporation (same pond storage), there is a need to verify that sufficient capacity is available. Therefore, this amended Order includes amendments to the Monitoring and Reporting Program requiring the Discharger to evaluate changes in flow rates, determine actual evaporation rates (separating the spray and pond evaporation), and project the next year's available capacity. This information is necessary annually to confirm that the disposal operations are managed such that adequate capacity is maintained or facility expansions are planned and constructed to prevent wastewater spills.

The Water Board's standard naming convention for required Monitoring and Reporting Programs (MRP) is to have the identical number as the Board Order minus the prefix of "R6T" or "R6V." In the original version of the MRP staff inserted the R6T in the MRP. This amendment will remove the prefix to the MRP.

### 8. Notification of Interested Parties

The Water Board has notified the Discharger and interested parties of its intent to issue amended waste discharge requirements for the proposed discharge.

9. Consideration of Public Comments

The Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that, pursuant to California Water Code section 13263, Board Order No. R6T-2006-0020 is amended as follows:

1. The following text is inserted into Finding No. 6, following paragraph two.

The evaporation from the Facility will be enhanced by the use of fog nozzles installed to spray wastewater effluent mist from a location just above the water surface of pond 3. The nozzles will be used up to 12 hours a day, 8 months of the year. An anemometer and automated shut-off system will prevent use of the nozzles when wind gusts are measured at 40 miles per hour or greater.

2. The first sentence in Finding No. 6, paragraph 4 (following the inserted text in letter A., above) is changed to read as follows:

"The disposal system is designed for an average flow rate of 70,704 gallons per day, which translates to 25.8 million gallons annually."

3. Section I.A. is changed to read as follows:

The total flow of wastewater to the authorized disposal site between October 1 and September 30 of consecutive years must not exceed 25.8 million gallons.

4. Section I.C.11 is changed to read as follows:

If the total flow to the Facility between October 1 and September 30 of consecutive years exceeds 80% of the designed capacity (designed capacity is 25.8 million gallons), the Discharger must file, within 180 days from the indication, a revised report of waste discharge signed by a registered California Civil Engineer documenting available capacity relative to anticipated flow increases due to potential new development of parcels in the Spalding Tract or other causes. The report of waste discharge must include preliminary plans for expansion or other modifications as needed to accommodate the increase in flow (including engineering plans, funding sources, and implementation time schedule).

- 5. To Section II, an item lettered F is added, as follows:
  - F. The use of evaporation spray nozzles to spray wastewater is prohibited when winds at the Facility gust at or above 40 miles per hour or when winds transport wastewater to land areas outside of the Facility ponds.
- 6. Section II.D.1 is changed to read as follows:

Pursuant to Water Code section 13267(b), the Discharger shall comply with Monitoring and Reporting Program No. 2006-0020 as amended by No. 2006-0020A1, as specified by the Water Board Executive Officer.

- 7. <u>All references to Monitoring and Reporting Program "No. R6T-2006-0020 " are changed to read as Monitoring and Reporting Program "No. 2006-0020."</u>
- 8. All other Findings, Discharge Specifications, and Provisions of Board Order No. R6T-2006-0020 not amended herein remain in effect.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 11, 2007.

HAROLD J. SINGER EXECUTIVE OFFICER

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

## AMENDED MONITORING AND REPORTING PROGRAM NO. 2006-0020A1 WDID NO. 6A180506011

FOR

# SPALDING COMMUNITY SERVICES DISTRICT SEWAGE EVAPORATION PONDS

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This amendment adds requirements	to Monitoring:	and Reporting Program	(MRP) No

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This amendment adds requirements to Monitoring and Reporting Program (MRP) No. 2006-0020, with no deletions. All other monitoring and reporting requirements in MRP No. 2006-0020 remain in effect. The following requirements are added:

- A. To section IV.B., new item No. 11 is added, as follows:
  - 10. Report of monthly visual inspections of the evaporation ponds. Visual inspections and reporting must include observing and noting any vegetation changes or differences in growth patterns in proximity to Facility ponds that may be attributable to increased moisture from over spray or liner damage. At least 3 times per year, during periods of evaporation spray system use and when winds are in excess of 30 miles per hour, inspect pond perimeter for potential over spray.
  - 11. Report use of the spray system to enhance evaporation. Provide information on the time the system is turned on or off, total hours of operation, and days of use. If the system has not been operated during the monitoring period, provide the reason. Specifically indicate the duration and number of spray system shut downs due to high winds, and the associated wind speeds and directions.
- B. To section V.A., new items No. 7 and No. 8 are added, as follows:
  - 7. Provide the total estimated annual evaporation (in million gallons) that occurred from the Facility during the monitoring period, with supporting documentation and/or computations. Include estimates of the fraction of the total wastewater eliminated by use of the spray evaporation system, with supporting documentation and/or computations. If the fraction of the total wastewater eliminated by use of the spray evaporation system is less than 0.41, indicate whether measures are needed to prevent wastewater accumulation that could lead to an unauthorized discharge or spill, or provide a description of actions that will be taken to prevent a wastewater spill, and a timetable for completion.

8. The Facility design capacity is based on an expected occupancy with all planned sewer connections. On an annual basis, determine and report whether flows based on occupancy, as projected in the report of waste discharge, differ from the actual flows using the equation that follows:

$$\left(\frac{C}{T}\right) \times 25.8 \,\mathrm{MG} = \mathrm{P}$$

where C = connections (actual);

T = total potential sewer connections; and

P = annual projected flow volume, in million gallons (MG).

If the actual measured annual flow volume is greater than 13.7 MG, the Discharger must provide a report signed by a registered California Civil Engineer documenting available capacity relative to projected flow volume. If actual capacity is less than 80 percent of annual projected flow volume, the Discharger must comply with section 1.C.11 as modified in section 4 of Board Order No. R6T-2006-0020A1.

Ordered By:

**EXECUTIVE OFFICER** 

Date: April 11, 2007